

SECTION I GENERAL INFORMATION

Rooto Corporation, Inc.
3505 West Grand River
Howell, MI 48843

EMERGENCY CONTACT: (517)-546-8330

DATE PREPARED: 01/05/2002

PRODUCT NAME: ROOTO LIQUID DRAIN CLEANER

N.F.P.A. 704: HEALTH: 3 FLAMMABILITY: 0 REACTIVITY: 2

This product is labeled in accordance with regulations administered by the Consumer Product Safety Commission and/or the Environmental Protection Agency, in that the use pattern and exposure in the workplace is generally consistent with that experienced by consumers. In certain respects, the requirements of the Occupational Safety and Health Administration applicable to the drafting of this Material Safety Data Sheet may differ from the requirements of those agencies and as a result, this MSDS may contain additional information to that found on the label.

SECTION II HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENT: Potassium Hydroxide PERCENT: 14%

CAS NUMBER: 1310-58-3 ACGIH TLV: 2 mg/m³, ceiling

OSHA PEL: 2 mg/m³ C MANUFACTURER PEL: Not Established

SECTION III PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: 271.4 (degrees F) SPECIFIC GRAVITY: Appr. 1.45 @ 68°F (Water = 1)

VAPOR PRESSURE: @ 68 F 2 mmHg (mm Hg) MELTING POINT: Not Applicable (degrees F)

VAPOR DENSITY: Not Applicable (Air = 1) EVAPORATION RATE: Not Applicable (BuAc = 1)

SOLUBILITY IN WATER: Soluble (W/ V%) pH: > 13 for 5% soln, dry basis

APPEARANCE AND ODOR: Clear colorless solution

SECTION IV**REACTIVITY DATA****STABILITY:**

Stable.

CONDITIONS TO AVOID:

Material is non-combustible, but upon contact with moisture or water may generate sufficient heat to ignite combustible materials.

**INCOMPATIBILITY:
(MATERIALS TO AVOID)**

Strong acids, many nitro-compounds, chlorinated hydrocarbons, peroxides, aluminum, zinc, tin.

**HAZ. DECOMPOSITION
PRODUCTS:**

Contact with carbohydrates may release carbon monoxide. Contact with some metals may evolve flammable hydrogen gas.

HAZ. POLYMERIZATION: Will not occur

CONDITIONS TO AVOID:

Not Applicable

SECTION V**FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT: Not flammable
(degrees F)

METHOD USED: Not Applicable

FLAMMABLE

LIMITS: LEL (V/V%) Not Applicable UEL (V/V%) Not Applicable

EXTINGUISHING MEDIA:

Non-combustible. Choose extinguishing media suitable for surrounding materials.

SPECIAL FIRE**FIGHTING PROCEDURES:**

Use NIOSH/MSHA approved positive pressure self-contained breathing apparatus when any material is involved in a fire.

**UNUSUAL FIRE AND
EXPLOSION HAZARD:**

Not Applicable

SECTION VI**HEALTH HAZARD DATA****ROUTES OF ENTRY FOR
SYSTEMIC POISONING**

Inhalation, dermal contact, ingestion, eye contact.

**HEALTH HAZARDS:
(ACUTE AND CHRONIC)**Acute: Burns to all tissues contacted, respiratory irritation.
Chronic: None except those secondary to burns and irritation.**CARCINOGENICITY**

Not known to be carcinogenic

**SIGNS AND SYMPTOMS
OF EXPOSURE:**

Skin, eyes, tissue burns, May cause mucous membrane and respiratory irritation/pulmonary edema. Ingestion may cause vomiting, diarrhea and may be fatal.

**MEDICAL CONDITIONS
AGGRAVATED BY EXPOSURE:**

None known.

**EMERGENCY AND FIRST
AID PROCEDURES:****IMMEDIATELY GIVE FIRST AID****EYES:** Immediately flush with water for 15 minutes, call a physician.
SWALLOWED: Immediately drink large quantities of water. **DO NOT INDUCE VOMITING.** Call a physician. Do not give anything by mouth to an unconscious person.
SKIN: Immediately flush with water for 15 minutes, call a physician.

SECTION VII**SHIPPING DATA**

D.O.T. Potassium Hydroxide Solution, Corrosive material, UN 1814

SECTION VIII**PRECAUTIONS FOR SAFE HANDLING AND USE****RELEASE OR SPILL**

Spilled material will absorb moisture to form a very slippery solution; be sure to clean up all spills quickly. Wear NIOSH/MSHA approved dust/mist respirator. Follow OSHA regulations for respirator use (see 29 CFR 1910.134). Wear goggles, neoprene coveralls, gloves and boots. Shovel or sweep up and place in an approved DOT container and seal. Neutralize residue with dilute acid such as acetic (vinegar) and flush with water. Do not wash un-neutralized product into sewers or waterways. Wash all contaminated clothing before reuse.

WASTE DISPOSAL METHOD:

Dispose only in accordance with applicable federal, state and local laws and regulations.

PRECAUTIONS In HANDLING AND STORAGE:

Store in cool dry place, out of reach of children on high shelf or in a locked cabinet. **DO NOT** use or mix with other chemicals or drain cleaners.

OTHER PRECAUTIONS:

Be sure can is empty and cap replaced before discarding. Do not rinse or incinerate container. Wrap can, and place in trash.

SECTION IX**CONTROL MEASURES****RESPIRATORY PROTECTION:**

Not Applicable

VENTILATION:

Not Applicable

SKIN PROTECTION:

Avoid skin contact. Wear protective gloves when cleaning up spills.

EYE PROTECTION:

Avoid eye contact. Wear chemical goggles when cleaning up spills.

WORK/HYGIENIC PRACTICES:

Avoid contact with skin, eyes and clothing. Eye wash and body flush facilities should be available at the work place.